0 7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	120	180	232	292	328
	80	135	187	247	286
	64	118	168	228	266
	64	120	178	237	271
PELAGETPRI DDNSKGLERV MNRI	RVNYTCVEVI RVLYTAMDIV RIVYTAIDVL RVVYDFVNVI	PEFSPDFIII .ELGFQFVLI .DKFDYIII	GEEPIKEH	VLNKPPTLAG VLNKKLTLSG VMEEKLSVPG ILDINA.DAG	Arabidopsis Chlorella Synnechocystis E. coli
IRSVLQFNRK MVFSTGNGNG	NLDLLLGLEN NLDLLLGLEN NLDLLLGLEQ NLDLIMGERR	EWLVDALKRT QNLIDSVK LVEQLK .KVLDDLK	LECDGIRDIK LEANGIYNVK LEAEDIGKIS LASKSRRAEN	IRSTNRGFPL IISTNKGEPL IISTNKGEPL LRASNQGEPV	
FVNNPSRRSP	VAIDADLGLR	LPMGFGGKAL	LRDADRVTGL	LGVIPEDSEV	.FF.SFFGG
	ALIDADIGLR	YNVTTKNM	IRDADRVAGL	LGAIPEDTSV	.LQE.FFLGEE
	VLIDADFGLR	DAINAEQMSQ	VRDADRVIGL	IGILPDDQKI	RIRRRLLGG
	VVIDFDIGLR	DADLTREGVA	VRDSDRILGI	VGVIPEDQSV	.FLKRLFGG
SQKTLISSPR FVNNPSRRS	LSLARYGFSV	LLCISKPRSK	VLVTTPDITA	DVQEMLGLSL	MVEEEPKKRG
	MSIARLGYRV	LLAISKNRQK	VIVTTPEITA	DVQEMLGIPL	TSPQKGMFQK
	AALARLGKKV	LLPAAQNRSK	IIVTTPEMSA	DILDLLAVPL	FMAAHNTLLN
	TGLAQKGKKT	ILPASQTRDK	AIITTPEVSS	DVLEILTIKL	FIEEE.KK.G
HQSLLLPSSL	GKTTTTANVG	VRDKRWSNFE	ITAITPANEA	IKGEDMMSVL	.VEQDSMKAV
	GKTTTTANLG	IRDKRWKNLA	INAIASAQEA	IQKNDMMSVR	IGKQDYFIDL
	GKTTTTANLG	VKDKRLPNLV	RNAVAPAQEA	VQLNQMISVE	EG.QDIPFLD
	GKTTSSAAIA	IKDKRTENLY	ALMALYFADE	VSRGDMLSME	LGEERPFR
MASLRLFSTN	VVITSGKGGV	NGDCRIDQAL	DCPAGIDAFG	MIVNRVRTDM	LAFEQAAWRL
	IVITSGKGGV	EGQCRIDQAL	DCPAGIDVGF	LLVNRVRPDM	IAFENAARRL
	IVVTSGKGGV	EDECTIDQAL	DCPAGIEAGF	LIVNRLRPEM	LAFQNIARRL
	IVVTSGKGGV	QGDATLNQAL	DSPAGIETGF	LLLTRYNPGR	KAYADTVERL

APPLN. FILING DATE: FEBRUART 0, 2002 TITLE: TRANSGENIC PLANTS . . GENE EXPRESSION INTOR(S): RANDY DINKINS ET AL. S.. ⊥ಪT 2 of 13

A. LICATION SERIAL NO: 10/067,989

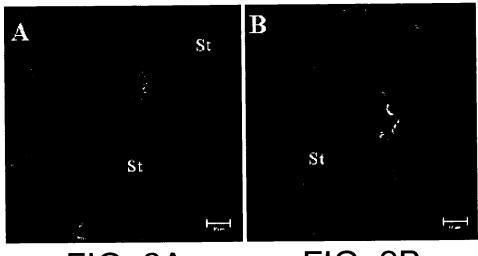


FIG. 2A

FIG. 2B

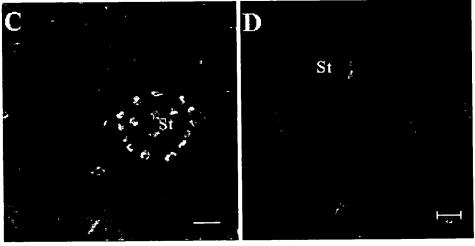


FIG. 2C

FIG. 2D

APPLN. FILING DATE: FEBRUARY 8, 2002

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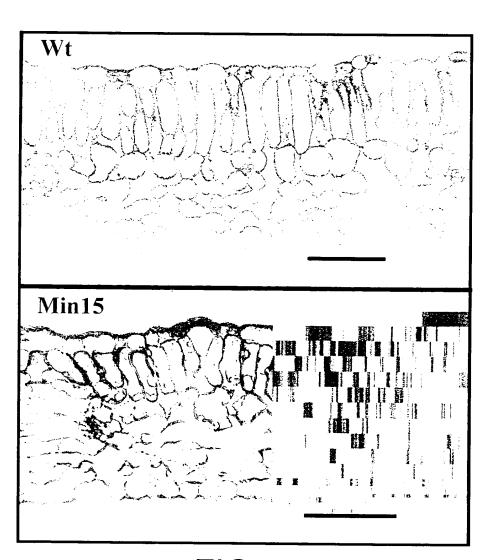
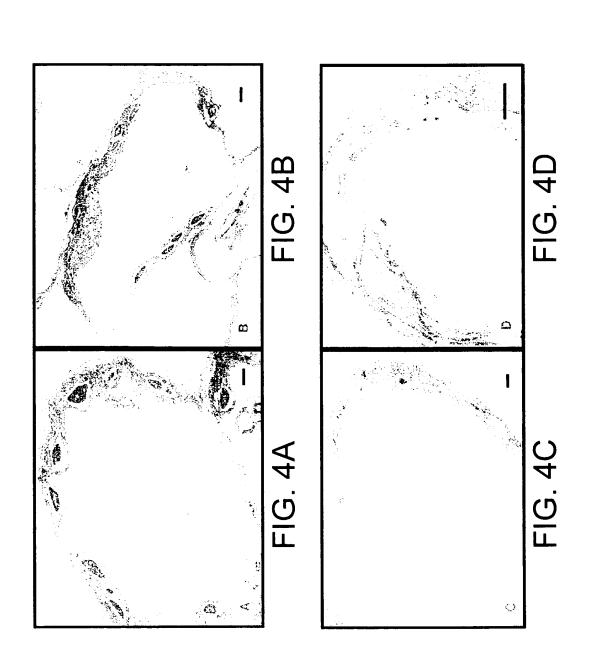


FIG. 3



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APPLICATION SERIAL NO: 10/067,989 SHEET 5 ... 13

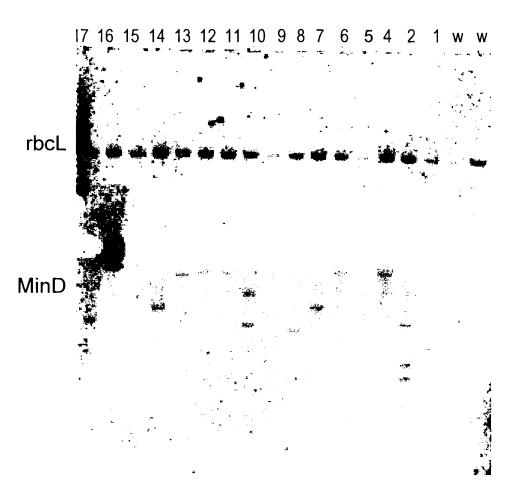


FIG. 5

TITLE TRANSGENIC PLANTS...GENE EXPRESSION IN OR(S): RANDY DINKINS ET AL.

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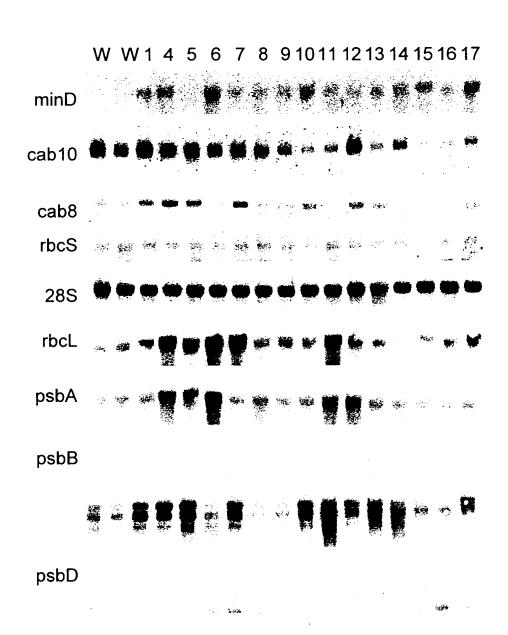


FIG. 6

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	Chlorophyl	l Content	Fluorescence Measurements								
Line	Total Chl	Chla/b	Fo	Fm	Fv/Fm						
	(ug/mg)	(ratio)	(relative units)	(relative units)	(relative units)						
NA CE	1.00	2.11	127 4 12 0	(1(()))	0.777+0.015						
WT	1.99	3.11	137.4 ± 12.0	616.6 ± 34.0	0.777 ± 0.015						
AtMin 4	1.71	2.64	135.7 ± 11.8	636.2 ± 27.1	0.787 ± 0.017						
AtMin 5	1.58	3.01	136.5 ± 17.1	534.9 ± 66.1	0.757 ± 0.020						
AtMin 8	3 1.46	3.07	128.5 ± 32.3	489.9±78.6	0.741 ± 0.037						
AtMin 9	1.66	3.00	125.5 ± 19.9	520.5 ± 58.3	0.759 ± 0.018						
AtMin 1	1.53	2.95	136.5 ± 11.3	543.1 ± 14.3	0.748 ± 0.025						
AtMin 1	1.44	2.71	139.5 ± 20.6	564.9 ± 32.7	0.756 ± 0.032						
WT	1.69	3.08	105.6 ± 14.9	441.9 ± 58.5	0.760 ± 0.016						
AtMin 1	1.74	2.80	126.4 ± 08.6	436.7±27.2	0.714 ± 0.035						
AtMin 1	1.60	3.11	123.4 ± 16.6	455.3±84.4	0.724 ± 0.040						
AtMin 1	1.91	3.28	115.9±17.9	441.5±64.5	0.737 ± 0.011						
AtMin 1	1.59	3.07	113.6 ± 17.2	444.1±58.2	0.743 ± 0.017						
AtMin 1	1.59	2.94	119.1 ± 19.5	433.0±45.9	0.724 ± 0.037						
AtMin 1	16 1.71	2.89	122.1 ± 10.7	447.7±41.0	0.725 ± 0.019						

The measurements were taken over two days, and due to variation in the F_o and F_M measurements these were kept separate. Fluorescence measurements are averaged from eight samples.

FIG. 7

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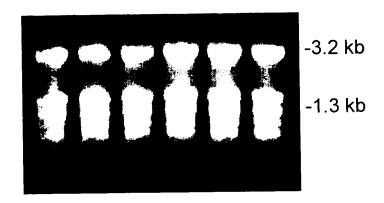
0	0	0	0	0	GAGPVSD 48	LARNTGD 77	r IEEMRREI 48	EKWREET 47	POLRKDI 46	POLOKDI 47	Prurkely 47	TCMREST 122	RKIVNNI 154	76	88	88	84	87	'PFGV 198	'YVPE 229
					MATLLQQGTFAPHRSWSGRKGTRRVSKPTLNRLHVRSSSKAGAGPVSD	HHHHRNRLSLPS♥SSK♥VDFTGFISNGVNSLETQKCTPGLAISRENTRGQVKVLARNTGD	MILELIERIFSRSGKNSGEDARREIKLVIANDRSGLSPEMMEENRREI	MITEFFER FLSN KGSREDVKRRIKUVLAHDRSTL NASTLEKWREET	KNTANIAKERLOIIVAERRRSD-AEPHYI	MSLILDFFRSRKS ONSASIAKERIOI IVAHERGOR - AQPDYLPOLOKDI	MSLIELLIFGRKQKTATVARDRIQIIIAQERAQEGQTPDYLPTURKELI	PGLOGFVAKLKAAWOLPFPEKPPV-LTPKDECKWRLRMILWADRCGITPDSLTCMRESI	RRSSNARIAKORIKMILFSDRCDVSDEAK	RTKAKSEAQES	KDI	ELK		KV	NLSTDPELGTIYSVAVPVRRVKSRRIGGVDTSEDGKIIVKWDPKDPNSDPSDQFPFGV	NVSTDGDLGTIYSYTYPPARVKP-EYQDVDEAGTITNVEYKDTRDGSVDVRFDFYVPE
					MATLLQQGTF	MAMSSGTLRISATLVSPYHHHHRNRLSLPS♥SSSK♥VDFTG	MILET'IERESRSG-	MITERFERGELSN	MAITLDEFLSRK	MSILIDPERSRKS-	MSLIELIFGRK		YELSPSPAEQEIESFLYN		LIVVSKYVELD-TDSLEFFSIRTD-SKMTALIANUPIRRIL	. LEVICKYVOID-PEMVINOLEOKDGDISILEINVILPEAE	LEVIRKYWPID-QEQION	MEVISKYWWVS-LDWIRISQEKQDG-MDWLELMIMDEQKKV	3 VQAVSAYVDIETEEFIEW	7 THALSDEWEIESEEKVOL
П	Ч	\vdash	П	J	\vdash	Н	⊣	\vdash	Н	Н	-	49	80	49	48	47	48	48	123	15.
Syne	Guill	Ecoli	Pseudo	Neiss	Chlorel	AtMinE	Syne	Guill	Ecoli	Pseudo	Neiss	Chlorel	AtMinE	Syne	Guill	Ecoli	Pseudo	Neiss	Chlorel	AtMinE

FIG. 8

APPLN. FILING DATE: FEBRUARY 8, 2002 TITLE: TO ANSGENIC PLANTS...GENE EXPRESSION INVENTO : RANDY DINKINS ET AL. SHEET 9 of 13 APPLICATION SERIAL NO: 10/067,989 AB ST RL CL FIG. 9A -1.0 kb Wt 5 1 2 3

FIG. 9B -3.2 kb

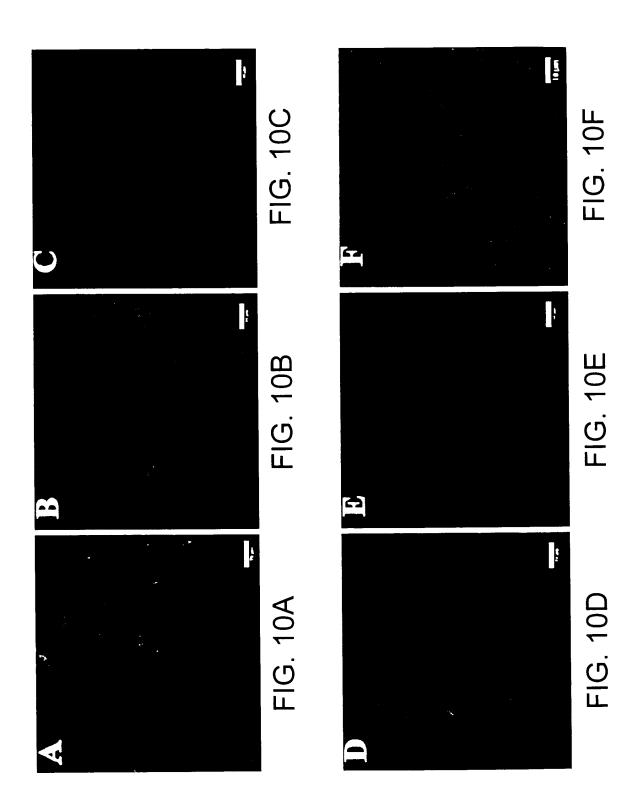




8 Wt FIG. 9C -1.0 kb APPLIN. FILING DATE: FEBRUART 3, 2002

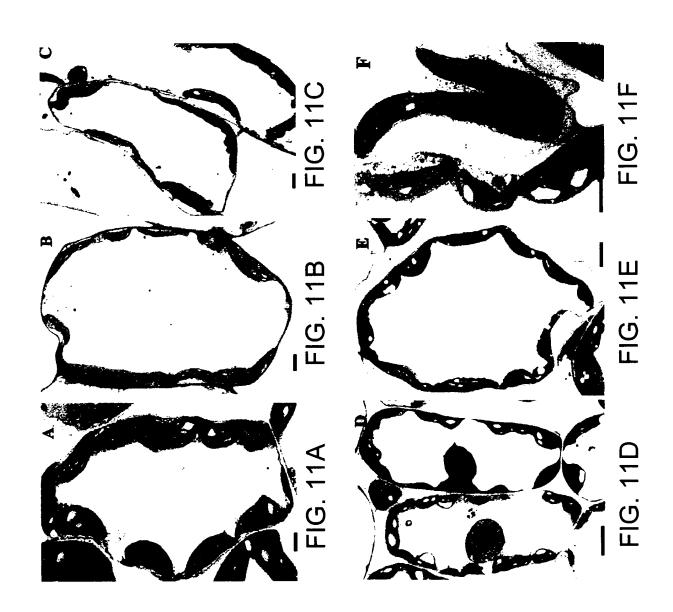
TITLE: TRANSGENIC PLANTS...GENE EXPRESSION
INVENTOR RANDY DINKINS ET AL.

APPLICATION SERIAL NO: 10/067,989 SHEET 10 of 1.5

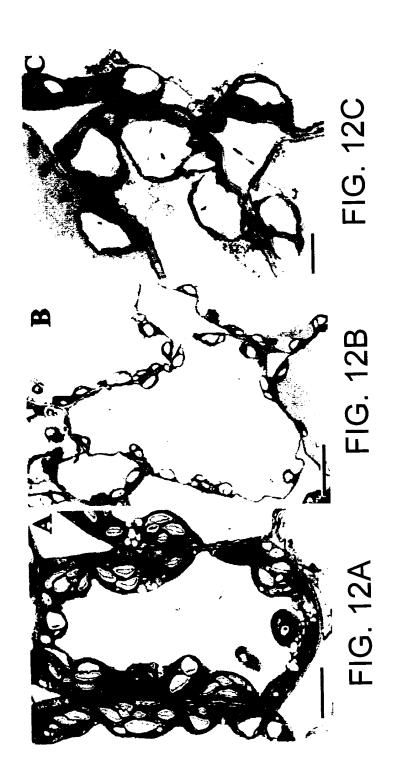


APPLN. FILING DATE: FEBRUARY 8, 2002
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TITLE: TRANSCENIC PLANTS. GENE EXPRESSION
INVENTOR(S) NDY DINKINS ET AL.
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TITLE: 7 NSGENIC PLANTS. . GENE EXPRESSITIVENTO. . RANDY DINKINS ET AL.
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